

REQUEST FOR ADDITIONAL INFORMATION  
FOR ENTERGY OPERATIONS, INC.  
RIVER BEND STATION, UNIT 1  
DOCKET NO. 50-458

### 3.5 Piping Evaluation

#### 3.5.1 Reactor Coolant Pressure Boundary Piping

On page 3-5 of the GE Safety Analysis report, a table summarizes the evaluation of the piping inside containment. Piping for systems such as main steam and feedwater include erosion/corrosion as a concern under power uprate conditions. However, the following systems do not include erosion/corrosion as a concern: the recirculation system, the RPV bottom head drain line, residual heat removal, low pressure core spray, high pressure core spray and RWCU. The staff requests the licensee to provide information supporting the exclusion of erosion/corrosion for the above listed systems.

#### General Flow Accelerated Corrosion (FAC) Questions

1. Since the effects of FAC on degradation of carbon steel components are plant-specific, the staff requests the licensee to provide a predictive analysis methodology that must include the values of the parameters affecting FAC, such as velocity and temperature, and the corresponding changes in component wear rates of the systems most susceptible to FAC before and after the power uprate. Please include predicted FAC wear rate changes in balance of plant components and those components most susceptible to FAC.
2. The staff requests that the licensee indicate the degree of compliance with NRC Generic Letter 89-08, "Erosion/Corrosion in Piping." This letter requires that an effective program be implemented to maintain structural integrity of high-energy carbon steel systems. The licensee should describe how the licensee's current program incorporates this guidance.
3. In Section 3.5.2, "Balance-of-Plant Piping Evaluation", the licensee states that the RBS erosion/corrosion program uses CHECWORKS™. The staff requests the licensee to discuss
  - a. The licensee's methodology for using CHECWORKS™ to monitor and inspect systems affected by FAC.
  - b. The licensee's plans for modifying CHECWORKS™ or other applicable FAC predictive methodologies to account for the power uprate.
  - c. Other plant systems such as feedwater, main steam and associated piping that use a generic computer code (e.g., CHECWORKS) for predicting wall thinning by FAC. If the code is plant-specific please provide its description.